	Application No.	**Applicant(s)**
Notice of Allowability	09/682,084	BOYLE ET AL.
	Examiner	**Art Unit**	
	Beemnet W. Dada	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *After final amendment filed on 05/05/2005*.

2. ☒ The allowed claim(s) is/are *1,2,4-8 and 12-20*.

3. ☒ The drawings filed on *18 July 2001* are accepted by the Examiner.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

      Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *5/18/05*

7. ☒ Examiner's Amendment/Comment

8. ☐ Examiner's Statement of Reasons for Allowance

9. ☒ Other *See Continuation Sheet*.

~~SUPERVISORY PATENT EXA~~
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Continuation of Attachment(s) 9. Other: Examiner-Initiated Interview Summary (PTOL-413).

DETAILED ACTION

1.   Claims 1, 8, 12, 14 and 19 have been amended and claim 3 has been amended on after final amendment filed on May 05, 2005. Claims 8, 12 and 19 have been amended and claims 9-11 have been cancelled by an examiner's amendment in this office action.

EXAMINER'S AMENDMENT

2.   An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark Rogers, Reg. No. 55,579 on 05/18/2005.

The application has been amended as follows:

In the claims:

8.   (Currently amended) A computer-implemented method for directly communicating between a first computer and a second computer using a third computer to establish communication comprising:

the first computer sending at least a first address and the second computer sending at least a second address to the third computer before the third computer establishes communications;

sending a call request from the first computer to the third computer, the call request identifying the second computer;

sending a message from the third computer to the second computer in response to the

call request, the message identifying a first address;

receiving the message at the second computer and generating a firewall-opening

packet that is destined to the first address of the first computer;

sending the firewall-opening packet from the second computer toward the first computer;

opening a window in a firewall that protects the second computer from receiving un-

requested packets when the firewall-opening packet is sent by the second computer, the

window allowing packets from the first computer to reach the second computer through the

firewall; and

sending direct communication packets from the first computer to the second address

through the window in the firewall created by the firewall-opening packet sent by the second

computer in response to the message from the third computer,

whereby the window in the firewall protecting the second computer is created for use by

the first computer;

wherein the firewall-opening packet is a User Datagram Protocol (UDP) packet and

wherein the direct communication packets are UDP packets;

wherein the firewall-opening packet is a null packet having no data in a data payload;

and

wherein the first address of the first computer sent in the message from the third

computer to the second computer comprises an IP address and a UDP port of the first

computer.

9.   (Cancelled)

10.   (Cancelled)

11.   (Cancelled)

12.   (Currently Amended) The computer-implemented method of claim 8 9 further

comprising:

    sending a reply message from the second computer to the third computer once the

firewall-opening packet has been sent; and

    sending a start message from the third computer to the first computer in response to the

reply message, the start message instructing the first computer to send the direct

communication packets directly to the second address of the second computer through the

window in the firewall.

19.   (Currently Amended) A computer-program product comprising:

    a computer-usable medium having computer-readable program code means embodied

therein for directly communicating with a remote peer through a firewall, the computer-readable

program code means in the computer-program product comprising:

    network connection means for transmitting and receiving packets from an Internet, the

packets including Transmission Control Protocol (TCP) packets from an external manager, and

User Datagram Protocol (UDP) packets from the remote peer;

    registration means for providing local UDP port identifying data to the external manager

before communication begins, the identifying data used by external manager to establish

communication with a remote client also registered with the external manager;

firewall-opening packet means, receiving a TCP message from the external manager

with a remote UDP port of the remote peer, for generating a firewall-opening packet that is

destined to the remote UDP port of the remote peer;

the network connection means also for sending the firewall-opening packet from a local

UDP port, the firewall-opening packet destined for the remote UDP port of the remote peer;

wherein a window in the firewall is created when the firewall-opening packet is sent, the

window allowing packets from the remote peer to reach the network connection means through

the firewall; ~~and~~

direct communication means, coupled to the network connection means, for sending

UDP packets from the local UDP port to the remote UDP port of the remote peer through the

window in the firewall created by the firewall-opening packet, whereby the window in the

firewall is created for use by the remote peer;

_____wherein the firewall-opening packet is a User Datagram Protocol (UDP) packet; and

wherein the firewall-opening packet is a null packet having no data in a data payload.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Beemnet W. Dada whose telephone number is (571) 272-3847. The

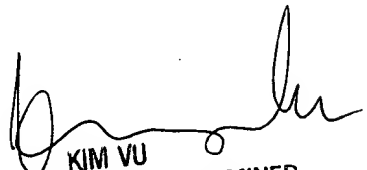examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

May 18, 2005

KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100